



GYR4101US



**R4000**  
PC & AV MUSIC REMOTE WITH  
ULTRASENSE™ AIR-MOUSE TECHNOLOGY

United States Version

## Table Of Contents

Introduction .....	1
Battery Installation and Information .....	1
Battery Saver .....	1
Gyro Operation .....	2
Product Diagram .....	3
Button Cluster Locations .....	3
RCU Mode Selection .....	6
Transport Control .....	7-8
Menu Navigation .....	9-10
Gyro Activation/Select .....	11
Channel/Volume Control & Media Center Green Button .....	11-12
MCE Shortcut Buttons .....	13
Numeric Keypad .....	14
Shortcut Buttons .....	15
Connect .....	16
Backlighting .....	17
Power/Standby Toggle Button .....	17
RF Receiver & Synchronization .....	18
Setting Up & Synchronizing The Remote & The PC, Receiver Installation .....	18
USB Features & Compatibility .....	19
Programming the Remote .....	20
Find Out If You Need to Program the Remote .....	20
Programming Methods .....	20-22
Using Automatic Code Search .....	20
Using Direct Entry .....	21
Volume Punch Through .....	22
Learning .....	23-24
Learning Tips .....	23
Code Learning & Learning Commands .....	23-24
Clearing an Individual Learned Function .....	24
Deleting All Learned Functions .....	25
Music Mode .....	25
Gyraton Music Service Application .....	25
Music Display Navigation .....	26
Troubleshooting .....	27-30
Remote Code List .....	31-50

## Introduction

This users' manual describes the operation of the R4000 PC & AV Music Remote Control Unit with UltraSense™ Air-Mouse Technology (RCU). The RCU contains an embedded micro gyro for motion sensing and in-air control of a floating cursor. This RCU features IR code database and IR learning capabilities to universally control standard home theater devices such as TVs, VCRs, Digital Video Recorders (DVR), DVD players, CD players, cable/SAT boxes, etc. Using the Music Display on the RCU, you can browse through your audio files and listen to your music on the PC without going to your computer. This RCU links directly to your Windows Media Player® or iTunes® Audio library.

The RCU is also equipped with a 2.4 GHz RF transceiver to send cursor movement information and other commands to the PC via a USB transceiver. The radio frequency (RF) transceiver delivers a range of up to 100 feet with no line-of-sight requirement. The 800 possible channels of the RF transceiver provide high resistance to interference from other radio devices.

## Battery Installation and Information

The R4000 PC & AV Music RCU requires four AAA Alkaline batteries. To install the batteries:

1. Remove the battery compartment cover.
2. Insert the batteries, matching the batteries to the (+) and (-) marks inside the battery compartment.
3. Replace the battery compartment cover and snap it into place.

## Battery Saver

The RCU saves battery power by automatically going into a low-power state if no button is pressed after a few seconds. See the Gyro section for gyro battery saver mode.

## Product Registration Information

Keep your sales receipt to obtain warranty parts and service and for proof of purchase. Attach it here and record the serial number in case you need it. The serial number is located on the product.

Model Number	_____
Serial Number	_____ Purchase Date _____
Dealer/Address/Phone	_____


## Gyro Operation

The RCU provides in-air control of the PC's cursor via patented gyroscopic motion sensing technology. This means mouse-like cursor control, from anywhere in the room, without the need of a flat surface. There is no line-of-sight requirement so you don't have to point the RCU at the PC you are controlling. Remember the following things when using the in-air cursor control feature of the RCU:

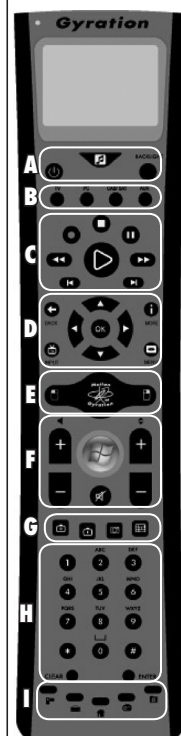
- Use your thumb to press the gyro and mouse buttons.
- Click the center button to activate the gyro motion-sensing control. Single click and hold to move the cursor and release it to "park" the cursor where you want it. Double click the center button and release it for continuous cursor movement similar to a standard mouse.
- The right and left buttons function like standard mouse right-click and left-click buttons.
- Move the cursor by flexing your wrist, not your arm or body, much as you would with a flashlight; side to side and up and down. Placing your arm on an armrest or on your lap will make this motion more comfortable.
- The RF Transmit LED indicates when gyro motion or other information is being sent. The LED does not illuminate when transmitting IR information.




## Product Diagram

Button Cluster Locations	Button Cluster	Function
	A Power (standby), Music Display Button, Backlighting	<b>Power/Standby:</b> Places the PC into Standby (or power off dependant on the PC configuration) <b>"Music Display Button"</b> Start Music display interaction with PC <b>Backlight:</b> Turns on and off the backlight RF Status LED is located at top left corner (next to Gyratation company name)
	B RCU mode selection and power	Selects RCU mode <b>TV:</b> IR legacy control <b>PC:</b> RF communication to PC <b>Cable/Satellite:</b> IR legacy control <b>Auxiliary:</b> IR legacy control
	C Transport control	Standard AV control for selected transport or Windows Media Player, iTunes, Windows Media Center, DVR, etc. (Play, pause, stop, etc) Includes IR control of legacy devices if supported in IR database


## Product Diagram (continued)

Button Cluster Locations	Button Cluster	Function
	D Menu navigation	Standard menu navigation: up, down, left, right, OK. Includes MS required buttons: <b>BACK:</b> RF=Back, IR=Last <b>MORE:</b> RF= More Info, IR=None Includes other buttons: <b>INPUT:</b> RF=none, IR=TV Input selection <b>MENU:</b> RF=DVD Menu, IR=Menu
	E Gyro button cluster	Center button activates gyro for in-air cursor control. Outer buttons function like standard left and right mouse buttons.
	F Volume and Channel control, eHome (Vista MCE Green Button), Mute	Standard volume up/down, channel up/down, Vista Media Center eHome, and volume mute.
	G Media Center shortcuts	Shortcuts buttons to easily navigate within the Media Center environment. <b>Recorded-TV, Live TV, My Pictures, Guide</b>

## Product Diagram (continued)

Button Cluster Locations	Button Cluster	Function
	H Alpha-numeric keypad	Standard <b>0-9</b> keys with alpha characters, plus *, space, #, <b>CLEAR</b> , and <b>ENTER</b>
	I US: Hotkeys (For US/North American Remotes only)	<b>My Videos, Mail, Web, My Radio, Favorites</b>

## RCU Mode Selection

	A	Puts RCU into <i>TV control mode</i> for communicating with TV via IR protocol.
	B	Puts RCU into <i>PC control mode</i> for communicating with the PC via RF protocol.
	C	Puts RCU into <i>Cable / Satellite control mode</i> for communicating with Cable or Satellite box via IR protocol.
	D	Puts RCU into <i>Aux mode</i> for communicating with an auxiliary device via IR protocol.
	E	<b>PC, TV, CAB/SAT, AUX mode:</b> Powers on/off the selected device. <b>PC Mode:</b> Issues a standby command. If the system is active, the first button pressed puts it into standby mode. If the system is already in standby mode, a button press will awaken.
	F	Music Display Button - Turns on Display and puts RCU into <i>Music control mode</i> for playing music stored on your PC.
	G	Backlight – Toggles the backlight for the button keys. If the Display is active, the Display backlight will turn on or off.
	H	Transmit LED indicator for RF transmission only

## Transport Control



	TV, CAB/SAT, AUX Mode or Music Mode:	PC Mode
A	Puts selected device into <i>Stop</i> mode, if supported	Stops media playback and positions pointer to start of media
B	Puts selected device into <i>Pause</i> mode, if supported	First button press will pause the media at present position. Subsequent button presses toggles between pause and playback at present position pointer.
C	Puts selected device into <i>Fast Forward</i> mode, if supported	Fast Forwards media.
D	Skip command, if supported by selected device	Skips ahead an increment: CD and Playlists skip to next song. DVD skips to next chapter. Slide show skips to next picture. DVR skips 29 seconds.
E	Puts selected device into <i>Play</i> mode, if supported	Start (if paused, continue) playback of media at present position pointer. Used by Media Center for Media Center media, DVR, CD/DVD, playlists and slide shows.

## Transport Control



	TV, CAB/SAT, AUX Mode or Music Mode:	PC Mode
F	Replay command, if supported by selected device	Move the position pointer back an increment: CD and Playlist: skips back to previous song. DVD: skips back to previous chapter. Slide show: skips back to previous picture. DVR skips back 7 seconds
G	Puts selected device into <i>Reverse</i> mode, if supported	Rewinds media.
H	Puts selected device into <i>Record</i> mode, if supported	Records the TV show to disk. Starts recording at the beginning of the show as defined by on-screen TV program guide (if the pause buffer enables it)

## Menu Navigation



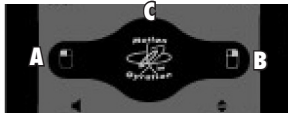
	TV, CAB/SAT, AUX Mode or Music Mode:	PC Mode
A	<b>BACK</b> - IR: Goes back one location (if supported)*	Goes back one location of the user interface
B	<b>MORE</b> - IR: Provides more information (If supported)	Provide information if available for the focus point
C	Menu Navigation Up*	Moves the focus point up one location, if at top of the screen takes no action
D	Menu Navigation Right*	Moves focus point right one position, if at rightmost position takes no action
E	Menu Navigation Down* * See Music Display Navigation Section for information on using the Music Display	Moves the focus point down one location, if at bottom of the screen takes no action

## Menu Navigation



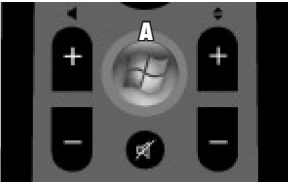
	TV, CAB/SAT, AUX Mode or Music mode:	PC Mode
F	Menu Navigation Left*	Moves focus point left one position, if at leftmost position goes back 1 page in the user interface
G	Menu OK Performs action indicated by focus point*	Performs action indicated by focus point
H	Menu IR: Setup menu	Media Center "DVD Menu"
I	TV Input IR: (TV Mode) Cycles through the TV inputs. No action in other modes  * See Music Display Navigation Section for information on using the Music Display	No action

## Gyro Activation/Select



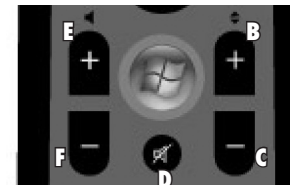
A	Performs a left-mouse button-click
B	Performs a right-mouse button-click
C	Activates gyroscope for motion-sensing cursor control, motion-sensing menu navigation, or other motion-sensing features. Single click and hold to move the cursor and release it to "park" the cursor where you want it. Double click the center button and release it for continuous cursor movement similar to a standard mouse.

## Channel/Volume Control & Media Center Green Button



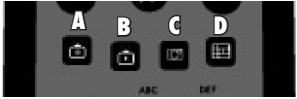
	TV, AUX or CAB/SAT Mode	PC Mode
A	Goes to Windows Vista Media Center Home page, launches Media Center if not running already.	Goes to Windows Vista Media Center Home page, launches Media Center if not running already.

## Channel/Volume Control & Media Center Green Button

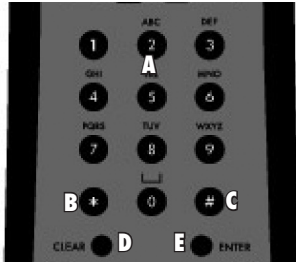


	TV, AUX or CAB/SAT Mode	PC Mode
B	Increment the current channel by 1	Increment the current channel by 1. If in a list view, move up a page in the list.
C	Decrement the current channel by 1	Decrement the current channel by 1. If in a list view, move down a page in the list.
D	Mute selected device, if applicable	Mute the entire PC volume, toggle mute state
E	Increment the current volume by 1 unit	Increment the current PC volume by 1 unit. If muted, un-mute the volume first.
F	Decrement the current volume by 1 unit	Decrement the current volume by 1 unit. If muted, un-mute the volume first.

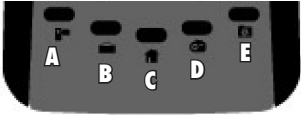
## MCE Shortcut Buttons

		
	PC, TV, AUX or CAB/SAT Mode	PC Mode
A - Recorded-TV	No action	Shortcut to the Windows Media Center "Recorded TV" page
B - Live TV	No action	Brings Media Center Live TV to the front
C - My Pictures	No action	Shortcut to the Windows Media Center "My Pictures" page
D - Guide	Shows the EPG (electronic program guide) for the particular device selected	Invokes the on-screen Media Center TV programming guide

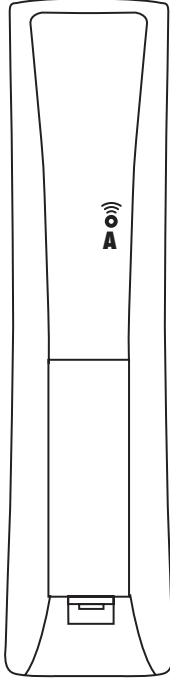
## Numeric Keypad

		
	PC, TV, AUX or CAB/SAT mode	PC Mode
A	Standard 1-9, alphanumeric	Standard 1-9, alphanumeric
B	Inserts a * symbol, if supported by the selected device	*
C	Inserts a # symbol, if supported by the selected device	#
D	Clear, if supported by the selected device	<i>Clear</i>
E	Enter, if supported by the selected device	<i>Enter</i>


## Shortcut Buttons

	
A	<b>My Videos:</b> Microsoft defined button - Shortcut to the Windows Media Center "My Videos" page
B	<b>Mail:</b> Launches default email program on the PC
C	<b>Web:</b> Launches default web browser on the PC
D	<b>My Radio:</b> Microsoft defined button - Shortcut to the Windows Media Center "My Radio"
E	<b>Favorites:</b> Displays the Web Browser "favorites" (favorite URL addresses). Only active when the Web browser is the focus.

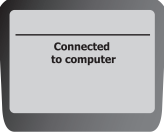
## Connect



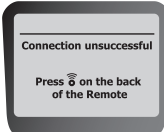
**A** **Connect:** Located on the back side of the RCU. Connects (Binds) the RCU to the Gyraton USB RF Receiver (requires a pen-tip to activate the button since it is below the surface)



Music Display While Connecting



Music Display Upon Successful Connection



Music Display Upon Unsuccessful Connection, See Troubleshooting Section For More Information

## Backlighting

The RCU Mode Selection buttons (**TV, PC, CAB/SAT, and AUX**) are lit when pressed; these buttons light up (for 2-3 seconds) whenever they are pressed to indicate which Control Mode the remote is in.

There is no automatic backlighting on any of the RCU buttons. The "Backlight" button controls the backlight of the RCU buttons and the Display. Upon pressing the "Backlight" button, the main RCU keys will be backlit. If the Display is active (by pressing the Display button), the Display will also become backlit.

The backlight acts as a toggle and can also be used to turn off all backlighting. Additionally, the backlighting will timeout after a short amount of time (timeout occurs after last button pressed and the backlight turns off if no other button is pressed within 10 seconds).

If the backlighting seems dim, the batteries may need to be replaced.

## Power / Standby Toggle Button

This button turns the selected device on or off or toggles its power state from standby to active. The device is selected with the RCU Mode Switches; **PC, TV, CAB/SAT, and AUX**.

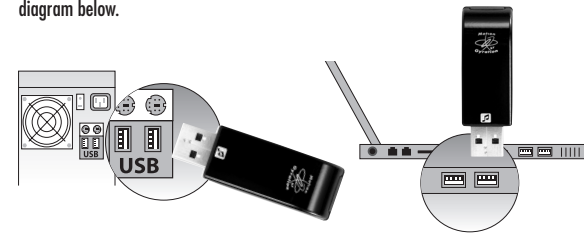
In **PC** mode, this button issues a standard Windows® *STANDBY* command. Various options for this command can be set up in Windows. Go to Start/Control Panel/Power Options/Advanced and then set a function for the *STANDBY* command. In the default configuration, if the PC is already on, press this button to put the PC into standby mode. If the PC is in standby mode, press and hold this button for 2 - 3 seconds to wake up the PC.

## RF Receiver & Synchronization

Communication between the RCU and the PC is done via an RF transceiver which is plugged into a standard USB port in the PC. In order for this to work, you need to synchronize, or "bind" your remote and PC. See below for the binding procedure.

## Receiver Installation

The RCU requires a USB RF transceiver be plugged into a USB port in the PC in order to access RF and gyro functions. The USB extension cable can be used to maximize the range of the RCU by placing the USB RF transceiver away from other electrical components. A USB RF transceiver does not need to be plugged in to use the IR remote functions. See the diagram below.



## Setting Up & Synchronizing The Remote & The PC

After inserting the batteries in the remote control unit,

1. Hold the remote in close proximity to the PC.
2. Press the **CONNECT** button on the RF Dongle transceiver which is plugged into the PC USB port.
3. Press the **CONNECT** button on the underside of the RCU.
4. The Display screen on the RCU will indicate a successful connection.
5. If a successful connection is not made, repeat steps 1 - 3

## USB Features

- Connects to PC via standard USB 1.1 or USB 2.0 connection
- PC operating systems supported: Windows Vista, Windows XP MCE, and Windows XP
- LED to indicate bind sequence and radio activity
- Connect button, pen-push type

## USB Compatibility

The transceiver uses a standard USB Type A connector for connection to any standard USB port of a computer. The transceiver is a certified USB compatible 2.0 device, running at low speed. It is certified to run on Windows Vista, Windows XP MCE, and Windows XP.

## Transceiver Compatibility Matrix with Gyration Products

This transceiver is compatible with the following Gyration products:  
R4000 (The Music Service and Music Display functions of this remote require use of the included R4000 RF Receiver to fully function)

Gyration Go Mouse

Gyration Go Mobile keyboard

Gyration Go Full size keyboard

Gyration Media Center Universal Remote Control

Gyration GyroTransport

## Programming the Remote

The RCU can be programmed to operate many brands of IR controllable devices via the IR functions of the RCU. Devices include TVs, DVD Players, Cable/Satellite Boxes, etc. Please see the Remote Code List for all devices supported.

## Find Out If You Need to Program the Remote

To determine whether the remote needs to be programmed to operate your device, do the following (using the TV as an example)

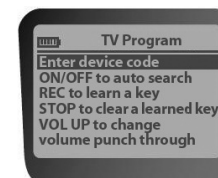
1. Turn on the TV.
2. Point the remote at the TV.
3. Press the TV button.
4. Press the ON/OFF button to see if the TV responds. If the TV doesn't respond, you must program the remote to operate it.

## Programming Methods

There are two ways to program the remote control: the Menu Based Programming Method and the Direct Programming Method.

### Menu Based Programming Method

To enter the Menu Based Programming Method, press and hold the device mode button of the particular device to be programmed. After three seconds, the main menu will appear on the display. All programming steps can now be completed by following the on-screen menu. Here is an example main menu that will be displayed after holding down the TV device mode button:



**Direct Programming Method:** The Direct Programming Method allows you to perform one particular programming step directly, as outlined below. To program the remote control to operate other components you may choose between Automatic Code Search and Direct Entry.

**Using Automatic Code Search:** The following instructions can be used to program the RCU to operate each of your components. If you want to stop the automatic code search without programming any of your components, press **CLEAR** and the indicator on the RCU turns off.

1. Turn on the device you want to operate (TV, DVD player, etc.)
2. Press and hold the device button you want to program (**TV**, **AUX**, etc.). While holding the device button, press and hold ON/OFF button until the device button on the RCU turns on, then release both buttons. When the RCU has successfully entered search mode all device buttons turn on. NOTE: This step must be completed within 2 seconds to activate Automatic Code Search without entering the Menu Program Method.
3. Point the remote at the device.

## Programming Methods (continued)

4. Press and release **PLAY**, then wait 5 seconds or until the device button stops flashing. At this point the RCU is searching for the correct code to program. If, after 5 seconds, the device you want to operate does not turn off, press **PLAY** again to tell the RCU to search the next set of codes. Continue pressing and releasing **PLAY** until the device turns off or you have searched through all of the codes. The device buttons flash when all codes have been searched, the device button turns off, and after 30 seconds the RCU exits the *Automatic Code Search* mode.

If the component you want to control *does* turn off:

1. Press and release **REVERSE**, then wait 2 seconds. Repeat this step until the component turns back on.
2. To finish, press **STOP** and the device buttons on the RCU turn off. The RCU will automatically exit the *Automatic Code Search* mode.

### Using Direct Entry

1. Turn on the device you want to operate (TV, DVD player, etc.)
2. Look up the brand and code number(s) for the device in the Remote Code List at the end of this booklet.
3. Press and hold the device button you want to program (**TV**, **AUX**, etc.) on the RCU.
4. Enter the 4-digit code from the Remote Code List.
5. Release the device button, if all the mode buttons flash, you have entered an invalid code. Otherwise, point the RCU at the device, and then press the **ON/OFF** button to see if the device responds to the command.
  - If you get no response, repeat these steps using the next code listed for your brand, until the device responds to the remote commands.
  - If you try all the codes for your device brand and none work, try the automatic code search method. If automatic code search doesn't find the code, the remote is not compatible with your component.

Because the RCU controls more than one device, you must first "tell" it which device you wish to operate. For example, if you wish to operate the TV, you must first press the **TV** mode button on the RCU to put it in the TV mode.

The RCU stays in the chosen mode until you change it. If the RCU is in the TV mode, you must change the mode in order to operate other components. For example, if you are in the TV mode and you wish to turn off the Cable Box, you must first press the **CAB/SAT** button then the **On/Off** button. Return to the TV mode by pressing the TV mode button.

## Programming Methods (continued)

### Volume Punch Through

The Volume Punch Through feature allows you to control the volume without exiting the current mode. When Punch Through is enabled, the **VOL+**, **VOL-**, and **MUTE** keys will always control the Punch Through device. By default the TV is the Volume Punch Through device. To disable Volume Punch Through, see the "Disabling Volume Punch Through" Section below.

**Note:** Volume Punch Through only applies to the three IR Mode Device Buttons (**TV**, **CAB/SAT**, and **AUX**).

**Note:** The remote must be programmed via Automatic Code Search or Direct Entry before enabling Volume Punch Through.

To change the Volume Punch Through device or enable Volume Punch Through:

1. Press and hold the device button of the device you want to Punch Through (**TV**, **AUX**, etc.) on the RCU.
2. Press and hold the **VOL-** button until all device buttons on the RCU turn on, then release both buttons.

Volume Punch Through is now enabled for the selected device. **NOTE:** The steps to enable Volume Punch Through must be completed within 2 seconds to activate without entering the Menu Program Method.

### Disabling Volume Punch Through

To disable Volume Punch Through:

1. Press and hold any device button (TV, AUX, etc.) on the RCU.
2. While holding the device button, press and hold the **MUTE** button until all of the device buttons turn on.

Volume Punch Through is now disabled.

**NOTE:** The steps to disable Volume Punch Through must be completed within 2 seconds to successfully disable without entering the Menu Program Method..

**Note:** If an invalid button is pressed, all device buttons blink 4 times and turn off. At this point, you must start over.

Once Volume Punch Through is disabled, the **VOL+**, **VOL-**, and **MUTE** keys will control the device currently selected by the Device button (**PC**, **TV**, **CAB/SAT**, or **AUX**). To enable Volume Punch Through, see the "Volume Punch Through" Section above.

## Learning

The RCU has the ability to *learn* the commands of other remote control units, such as TV remotes or VCR remotes. This allows the most-used commands on those remotes to be combined on the RCU. These original remote control units are also known as source remotes. Learning is not active in the PC mode.

### Learning Tips

1. All learned functions for a mode can be erased if you program a different device to that mode.
2. Perform the learning process in low-light areas because too much ambient light might cause interference with the infrared (IR) signals of the remotes.
3. Use fresh batteries in both the RCU and the original remote.
4. Set the two remotes on a table or other flat surface, and don't move them around while learning.

### Code Learning

Codes from the Remote Code List include basic functionality for each component they control. Once you have programmed in the code for your specific component (using either the Automatic Code Search or Direct Entry method), you can customize the RCU to perform certain functions from your original remote(s) that were not embedded in the preset code. The RCU has the ability to learn and store commands from your original remote(s) under the mode(s) of your choice.

### Learning Commands

For the following section, the TV remote control unit will be used as an example. Learning from other types of remotes will be done in a similar way.

- 1) First press and hold the device button on the RCU for the component remote you are learning from (the TV button on the RCU, for example) then press and hold the **RECORD** button on the RCU.
- 2) Keep pressing both buttons until all device mode buttons turn on. Release both buttons. The selected device button will remain on indicating which device is being programmed.

**NOTE:** The first two steps to learn commands must be completed within 2 seconds to learn without entering the Menu Program Method.



Remotes should  
not be  
more than  
2" apart



## Learning (continued)

- 3) On the RCU, press and release the button where you want to store the new function (the device button turns off).

**Note:** If you press an invalid button on the remote, the device mode button flashes 4 times to alert you. You'll have to repeat step 3.

- 4) Position the source remote facing the bottom of the RCU no more than 2 inches apart. Press and hold the button of the source remote that has the functionality you are recording. Keep pressing the button until the RCU device mode button light turns on (the source function has been saved to the TV mode on the RCU).

**Note:** If all device mode buttons flash 4 times, the function wasn't learned. Try again starting with Step 1.

- 5) The RCU remains in the "learning mode" so you can continue adding functions to different buttons by repeating steps 3 and 4.
- 6) Press **CLEAR** to exit the learning mode.

## Clearing an Individual Learned Function

To delete a learned button function, use the procedure below.

1. Press and hold the device mode button (the device button lights). Then press and hold the **STOP** button. Hold both buttons depressed until all device mode buttons turn on.
- NOTE:** This step to must be completed within 2 seconds to be able to clear an individual learned function without entering the Menu Program Method.
2. Release both buttons. The device mode button turns on indicating that the RCU is now in the Clear Learned Function mode for that device.
  3. Press and release the button where learning is to be cleared. The device mode button blinks off then back on indicating that the function was cleared successfully.
  4. Repeat Steps 1 through 3 until all the buttons' learned functions have been cleared.
- Note:** If an invalid button is pressed, the device mode button flashes 4 times, the selected component button stays on, and the RCU remains in Clear Learned Function mode. Repeat Step 3 to continue the clearing process.
5. Press the **CLEAR** button to return the RCU to normal operation.

## Deleting All Learned Functions - One Device

To delete all learned functions for one device at one time, use the procedure below.

1. Press and hold the device mode button (the device button lights). Then press and hold the **CLEAR** button. Hold both buttons depressed until all device mode buttons turn on.
- NOTE:** This step to must be completed within 2 seconds to be able to clear all learned

functions from a device without entering the Menu Program Method.

2. Release both buttons. The device mode button turns on indicating that the RCU is now in the Deleting All Learned Functions mode for that component.

3. Press and release 1, 2, 3 and all of the learned keys for that device will be erased. Any other key will exit the Deleting All Learned Functions mode.

**Note:** Pressing the **CLEAR** button while in this mode will not delete the learning functions, but it will exit this delete mode.

## Music Mode

Music mode is a revolutionary new way for you to search through and play your favorite songs that you have already setup on your Windows PC. It links directly to your Windows Media Player or iTunes Audio library so that you can browse through your audio files and listen to your music without going to your computer.

**Note:** This mode of the RCU is intended for use on the Windows operating system using the Windows Media Player application (version 10 or higher) or iTunes application (version 7.5 or higher). Operation on other operating systems has not been verified.

## Gyration Music Service Application

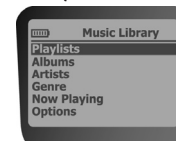
The RCU comes with a software application that runs in the background (as a "service") on the computer (PC) and interfaces to the Windows Media Player or iTunes music database. The application communicates the music database information to the RF transceiver attached to the computer. The information is then transmitted via RF to the RCU and shown on the display. Gyration Music Service Application is required for operation of the Music display. This Software service is provided via an installation CD. Check for software updates at [www.gyration.com](http://www.gyration.com).

During installation of the software service, you will select the default music interface, Windows Media Player or iTunes. The music interface can be changed at any time by clicking on the tray icon, where there are two menu items (Windows Media Player and iTunes), with a check mark next to the active one. You simply click on the other one to change the setting.

This software service can be enabled/disabled manually by the user. The service is set to "enabled" by default (upon system boot). Disabling the service has no effect on normal RCU operation (TV, PC, CAB/SAT, and AUX modes), but will make the display inoperable.

## Music Display Navigation

When you press the Music Display button (  button) the Display powers up and displays the top level menu structure. (If service application is running and within range, see the Troubleshooting section for more details).



To move up and down the screen, use the **UP** and **DOWN** arrow keys.



To enter a menu level, use either the right (or OK) button. To back out of a level, use the left (or Back) button. You can play the whole album by pressing the Play button at this level, or enter the album and select a specific song.

**Note:** As you navigate through the menu the heading changes on the top line.





While a song is playing, the MP3 Tag information (called Metadata) will be shown on the display along with a progress bar, the current running time and the time left for that song.



## Troubleshooting

### Adjusting the Contrast on the Display

To adjust the contrast on the Display, perform the following steps:

1. With the Display screen active, press and hold the  button located beneath the Display screen.
2. Continue to hold the  button after the Display screen turns off for 5 more seconds.
3. The Display Contrast adjustment screen will appear.
4. Use the menu navigation up and down arrows to adjust to the desired appearance.
5. Press any button to exit.
6. If no button is pressed, the display will time out in about 5 seconds.

**Note:** The contrast settings range from 0 (lightest) to 21 (darkest). Low levels of the contrast setting may cause the unit to have no visible display.

**Note:** The contrast value is stored, even when removing the batteries.




### Reinstalling the R4000 Installation Software

To reinstall the R4000 Installation Software service application, perform the following steps:

1. With Windows® running on your computer, insert the CD into your CD/DVD-ROM drive.
2. If the CD window does not open automatically, double-click the My Computer icon on your desktop, and then double-click the CD/DVD-ROM drive containing the CD.
3. Locate the install package provided on the CD for your RCU.
4. Follow the instructions provided by the CD to extract and install the application.

## Troubleshooting

### Common Problems and Solutions

Cursor Control Issues		
Problem	Cause	Solution
The Display screen does not match or show the updates to the Windows Media Player or iTunes audio library.	The Gyration Music Service Application did not update correctly.	Restart Application, by clicking the Gyration Music Service (green) icon on the Windows Taskbar, and clicking "Restart."
	The Display screens needs to be manually refreshed.	Press the  button to return to the Main Menu.
	The Display screens needs to be manually refreshed.	Use the menu navigation buttons to move up or down from the current level in the Display screen.
The Menu Navigation buttons are non-responsive while the Display screen is active.	The Gyration Music Service Application has lost contact with the remote control.	Refresh the Display screen by pressing the  button for three seconds to shut off the Display screen, then pressing the  button again to turn the Display screen back on.
	The remote control is out of range with the computer. (Display shows: out of range)	Place the remote control closer to the computer.
The cursor does not move when the "Motion by Gyration" button is pressed.	The remote control and computer are not connected.	Connect the RCU with your computer.
	The batteries are low.	Replace the batteries.

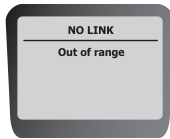

## Troubleshooting

### Common Problems and Solutions

Cursor Control Issues		
Problem	Cause	Solution
The cursor movement is choppy or erratic.	There may be radio interference near the computer.	Move any electronic devices away from PC (i.e., speakers, radio, etc.).
The cursor moves too fast or too slow.	The speed or acceleration is not set properly.	Change the cursor tracking speed under the Mouse settings in the Control Panel.
The cursor drifts on the screen.	The remote control sensor may require self-recalibration.	Place the remote control on a flat surface for 5 or more seconds. The gyroscope will perform a self-steady routine to identify and eliminate drift.
The cursor moves even when I'm not pressing the "Motion by Gyration" center button	You are in continuous cursor movement mode.	Press the "Motion by Gyration" button to exit this mode. See the Gyro Operation section for more details.
The Power/Standby button does not wake the computer out of Standby mode.	If the computer is placed into Hibernation or Shutdown mode, and then the AC power is removed, the internal receiver loses its power and cannot wake the system (even if AC power is reapplied).	Turn on the computer manually using the system Power button.
	If the BIOS setting for Wake from USB is disabled, the system will not turn back on via the remote control.	Enable the wake from USB option in the system BIOS. For information on accessing the system BIOS, see your Owner's Manual.
	The Power/Standby button may need to be held down for PC to recognize it.	Press and hold the Power/Standby button for 2 -3 seconds to wake the PC. See the Power / Standby Toggle Button section for more details.

## Troubleshooting

### Common Problems and Solutions

Cursor Control Issues		
Problem	Cause	Solution
<p>The text "NO LINK" is displayed on the Display screen.</p> 	The remote control and computer are not connected.	Connect the R4000 Music Remote with your computer.
<p>The text "NO SERVICE" is displayed on the Display screen.</p> 	<p>There may be radio interference near the computer.</p> <p>The remote control is out of range with the computer.</p> <p>The Gyration Music Service Application is not enabled.</p>	<p>Move any electronic devices away from PC (i.e., speakers, radio, etc.).</p> <p>Place the remote control closer to the computer.</p> <p>To re-enable the Application, click the Gyration Music Service (red) icon on the Windows Taskbar and click "Start."</p>
The text on the Display Screen is in English (if applicable).	All text in the remote control Display screens will be in English until a successful connection to the computer has been made.	Connect the R4000 Music Remote with your computer.

## Remote Code List

Brand	Code										
TV											
Abex	1098										
Acer	1041										
Admiral	1001	1099									
Adventura	1100										
Aiko	1015										
Aiwa	1034										
Akai	1002										
Alleron	1044										
Amtron	1036										
Anam National	1003	1036									
AOC	1004	1005									
Apex	1074	1088	1111	1119							
Audiovox	1036										
Bell & Howell	1001	1045									
Benq	1042	1136									
Bradford	1036										
Broksonic	1114	1121									
Candle	1004	1007	1100								
Celebrity	1002										
Citizen	1004	1007	1015	1036	1073	1097					
Colortyme	1004										
Concerto	1004										
Contec/Cony	1011	1012	1036								
Craig	1036										
Crown	1036	1053									
Curtis Mathes	1000	1004	1014	1045	1073	1097					
CXC	1036										
Daewoo	1004	1005	1013	1015	1016	1097	1106	1135			
Daytron	1004	1097									
Dell	1141	1142	1146								

## Remote Code List

Brand	Code									
TV										
Dimensia	1000									
Electroband	1002									
Electrohome	1002	1003	1004	1018	1021					
Emerson	1004	1011	1013	1025	1031	1033	1036	1044	1045	
	1080	1097	1102	1107						
Envision	1004									
ESA	1046									
Fisher	1043	1045	1047	1103						
Fujitsu	1029	1044								
Funai	1036	1044								
Futuretech	1036									
Gateway	1038									
GE	1000	1003	1004	1008	1021	1048	1049	1063	1068	
	1070	1144								
Goldstar	1004	1005	1011	1018	1050	1090	1091	1097	1098	
Grunpy	1036	1044								
Hallmark	1004									
Harvard	1036									
Hisense	1112									
Hitachi	1004	1011	1012	1030	1051	1084	1085	1086	1102	
	1132	1133	1134							
IMA	1036									
Infinity	1053									
Janeil	1100									
JBL	1053									
JC Penney	1000	1004	1005	1007	1012	1021	1048	1049	1058	
	1063	1068	1072	1073	1075	1097	1098			
JCB	1002									
Jensen	1004									
JVC	1011	1012	1026	1049	1054	1055	1080	1117	1130	
	1131									

## Remote Code List

Brand	Code									
TV										
Kawasho	1002	1004								
Kenwood	1004	1018								
Kloss Navabeam	1036	1056	1057	1100						
KTV	1036	1097								
LG	1005									
Loewe	1053									
Logik	1001									
Luxman	1004									
LXI	1000	1004	1045	1053	1058	1068	1075			
Magnavox	1004	1007	1018	1053	1056	1057	1059	1060	1110	
	1147									
Majestic	1001									
Marantz	1004	1051	1053							
Megatron	1004	1051								
Memorex	1001	1004	1005	1022	1045					
MGA	1004	1005	1018	1021	1047	1061				
Midland	1049	1068	1097	1098						
Minutz	1048									
Mitsubishi	1004	1005	1018	1021	1032	1047	1061			
Montgomery Ward	1001									
Motorola	1003	1099								
MTC	1004	1005	1073							
Multitech	1036									
NAD	1004	1058	1075	1085						
NEC	1003	1004	1005							
NET-TV	1040									
Nikko	1004	1015								
NTC	1015									
Onwa	1036									
Optimus	1085									

## Remote Code List

Brand	Code									
TV										
Optonica	1064	1099								
Orion	1023	1033	1107							
Panasonic	1003	1010	1049	1053	1096	1123	1140	1152		
Philco	1003	1004	1005	1007	1011	1018	1053	1056	1057	
	1059									
Philips	1003	1007	1011	1017	1018	1037	1053	1056	1057	
	1059	1063	1095	1126	1129	1148				
Philips Magnavox	1148									
Pilot	1097									
Pioneer	1004	1085	1102							
Portland	1004	1005	1015	1035	1097					
Price Club	1073									
Prima	1113									
Prism	1049									
Proscan	1000	1008	1068							
Proton	1004	1011								
Quasar	1003	1039	1049	1062	1069					
Radio Shack	1000	1045								
Radio Shack/Realistic	1004	1011	1036	1045	1064	1097	1098			
RCA	1000	1003	1004	1005	1008	1018	1028	1052	1065	
	1067	1068	1071	1076	1082	1102	1104	1106	1108	
	1115	1143	1151							
Realistic	1000	1045								
Sampo	1004	1097	1098	1120						
Samsung	1004	1005	1011	1014	1018	1019	1072	1073	1078	
	1094	1097	1098							
Sansui	1023	1107	1122							
Sanyo	1045	1103								
Scotch	1004									
Scott	1004	1011	1033	1036	1044					

## Remote Code List

Brand	Code									
TV										
Sears	1000	1004	1012	1018	1044	1045	1047	1055	1058	
	1068	1075	1103	1105						
Sharp	1004	1009	1011	1025	1064	1077	1092	1097	1099	
	1138	1153								
Signature	1001									
Simpson	1007									
Sony	1002	1037	1109	1128	1137					
Soundesign	1004	1007	1036	1044						
Squareview	1105									
SSS	1036									
Starlite	1036									
Supre-Macy	1100									
Supreme	1002									
Sylvania	1004	1007	1018	1027	1046	1053	1056	1057	1059	
	1060	1124	1145	1150						
Symphonic	1024	1031	1036	1105						
Tandy	1099									
Tatung	1003									
Technics	1049									
Techwood	1004	1049								
Teknika	1001	1004	1005	1007	1011	1012	1015	1036	1044	
	1060	1073	1096	1097						
TMK	1004									
Toshiba	1006	1045	1058	1073	1075	1079	1083	1087	1093	
	1101	1116	1127							
Totevision	1097									
Universal	1048	1063								
Victor	1055									
Vidtech	1004	1005								
Viewsonic	1149									

## Remote Code List

Brand	Code									
TV										
Viking	1100									
Wards	1000	1001	1004	1005	1018	1031	1044	1048	1053	
	1056	1057	1059	1060	1063	1064				
White Westinghouse	1013									
Yamaha	1004	1005	1018							
Zenith	1001	1020	1081	1089	1118	1125				
TV/DVD Combo (TV)										
Apex	1074									
Broksonic	1114									
RCA	1076	1115								
Sansui	1122									
Sylvania	1150									
Toshiba	1116									
TV/DVD Combo (DVD)										
Apex	3095									
Broksonic	3053									
RCA	3099	3063								
Sansui	3071									
Sylvania	3092									
Toshiba	3054									
TV/VCR Combo (TV)										
Broksonic	1121									
GE	1070									
Quasar	1062	1069								
RCA	1028									
Samsung	1078									
Sylvania	1145									
Toshiba	1006									
Zenith	1118									

## Remote Code List

### Brand Code

#### TV/VCR Combo (VCR)

Broksonic	2098	
GE	2069	
Quasar	2067	2068
RCA	2065	
Samsung	2070	
Sylvania	2064	
Toshiba	2063	
Zenith	2060	

#### TV/DVD/VCR Combo (TV)

Panasonic	1123	1152
RCA	1151	
Sharp	1153	
Sylvania	1027	1124
Toshiba	1087	1101

#### TV/DVD/VCR Combo (DVD)

Panasonic	3075	3076
RCA	3077	
Sharp	3086	
Sylvania	3064	3078
Toshiba	3094	3093

#### TV/DVD/VCR Combo (VCR)

Panasonic	2072	2073
RCA	2046	
Sharp	2055	
Sylvania	2050	2071
Toshiba	2059	2056

#### DVD

Aiwa	3026	3131			
Apex	3001	3056	3057	3095	3098
Audiovox	3132				

## Remote Code List

### Brand Code

#### DVD

Blaupunkt	3136			
BOSE	3122	3130		
Broksonic	3053	3072		
Clarion	3100			
Classic	3101			
CyberHome	3083			
Daewoo	3058	3062	3137	3138
Denon	3040	3110	3133	
Emerson	3059	3073		
Fisher	3112	3134		
GE	3041	3079	3118	
Go Video	3046	3124	3127	3129
GPX	3114			
Harman Kardon	3125			
Hitachi	3000	3027	3126	
Irradio	3017			
JVC	3047	3090	3096	3097 3115
Kenwood	3019	3039		
Konka	3029			
Lasonic	3081			
Magnavox	3002	3018		
Marantz	3034			
Memorex	3003			
Mintek	3004			
Mitsubishi	3021	3030	3123	
NAD	3059	3139		
Nakamichi	3116			
Norcent	3005	3117		
Onkyo	3006			
Ortron	3009			

## Remote Code List

Brand	Code									
DVD										
Panasonic	3066	3075	3076							
Philips	3018	3032	3045	3051	3091	3109				
Pioneer	3008									
Polaroid	3007									
Proscan	3010	3033	3118							
Qwestar	3009									
RCA	3010	3048	3055	3063	3077	3099	3107	3118		
Sampo	3119									
Samsung	3012	3049	3074	3085	3102					
Sansui	3071									
Sanyo	3050	3120								
Sharp	3013	3015	3044	3086						
Sherwood	3121									
Sony	3014	3020	3022	3065	3067	3068	3069	3070	3087	
	3103	3108	3113							
Sylvania	3064	3078	3092							
Techwood	3141									
Toshiba	3023	3025	3037	3038	3054	3080	3084	3088	3093	
	3094	3135								
Yamaha	3028									
Zenith	3052	3128								
CD										
Denon	2104									
JVC	2099									
Onkyo	2100									
Pioneer	2101									
RCA	2102	2106								
Sony	2105									
Yamaha	2103									

## Remote Code List

Brand	Code									
Digital Network Recorder										
Sony	2001									
DVR										
Panasonic	2004									
Philips	2002									
RCA	2000									
RePlay	2003									
Tivo	2000									
PVR										
Tivo	2087									
VCR										
Admiral	2027									
Adventura	2047									
Aiko	2048									
Aiwa	2047									
Akai	2081	2084								
American High	2042									
Asha	2035									
Audio Dynamics	2031	2032								
Audiovox	2036									
Beaumont	2034	2035								
Bell & Howell	2033									
Broksonic	2034	2078		2098						
Calix	2036									
Candle	2035	2036	2037	2039	2040					
Canon	2042									
Carver	2062									
CCE	2048	2061								
Citizen	2035	2036	2037	2039	2040	2048				
Colortyme	2031									
Colt	2061									

## Remote Code List

Brand	Code										
VCR											
Craig	2035	2036	2044	2061							
Curtis Mathes	2026	2031	2035	2040	2042						
Cybernex	2035										
Daewoo	2037	2039	2047	2048	2085						
DBX	2031	2032									
Dimensia	2026										
Dynatech	2047										
Electrohome	2036	2049									
Electrohome	2036										
Emerson	2034	2036	2037	2042	2047	2049	2076	2097			
Fisher	2033	2044									
Fuji	2042	2084									
Funai	2028	2047									
Garrard	2047										
GE	2026	2035	2042	2069							
Go Video	2043	2045	2088	2092							
Goldstar	2031	2036	2040								
Gradiente	2047										
Harley Davidson	2047										
Harman Kardon	2031										
Harwood	2061										
Headquarter	2033										
Hi-Q	2044										
Hitachi	2038	2058	2081								
Instant Replay	2042										
JC Penney	2031	2032	2033	2034	2035	2036	2042	2058	2061		
	2062	2062									
JCL	2042										
Jensen	2058	2081									

## Remote Code List

Brand	Code							
VCR								
JVC	2030	2031	2032	2033	2040	2081	2093	
Kenwood	2031	2032	2033	2040	2081			
KLH	2061							
Kodak	2036	2042						
LG	2036							
Lloyd's	2047							
Logik	2061							
LXI	2036							
Magnavox	2042	2062	2077					
Magnin	2036							
Marantz	2031	2032	2033	2040	2042	2062		
Marta	2036							
Matsushita	2042							
MEI	2042							
Memorex	2027	2033	2035	2036	2042	2044	2047	2077
MGA	2049							
MGN Technology	2035							
Midland	2057							
Minolta	2058							
Mitsubishi	2049	2058						
Montgomery Ward	2027							
Motorola	2027	2042						
MTC	2035							
Multitech	2035	2047	2057	2061				
NEC	2031	2032	2033	2040	2081			
Nikko	2036							
Noblex	2035							
Olympus	2042							
Optimus	2027	2036						

## Remote Code List

Brand	Code								
VCR									
Panasonic	2042	2072	2073	2079	2080	2082	2083		
Pentax	2058								
Pentax Research	2040								
Philco	2042	2062							
Philips	2042	2062	2091						
Pilot	2036								
Pioneer	2032	2058							
Polaroid	2041								
Portland	2039								
Proscan	2026								
Protec	2061								
Pulsar	2077								
Quarter	2033								
Quartz	2033								
Quasar	2042	2067	2068						
Radio Shack	2027	2036							
Radio Shack/Realistic	2033	2035	2036	2042	2044	2047	2049		
Radix	2036								
Randex	2036								
RCA	2026	2035	2042	2046	2058	2065	2066	2086	2094
Realistic	2027	2033	2035	2036	2037	2042	2044	2047	2049
Ricoh	2090								
Runco	2077								
Samsung	2035	2037	2054	2057	2070	2075	2095		
Sanky	2027	2077							
Sansui	2032	2081							
Sanyo	2033	2035	2044	2096					
Scott	2034	2037							
Sears	2033	2036	2042	2044	2058				
Sharp	2027	2039	2049	2055					
Shintom	2061	2084							

## Remote Code List

Brand	Code								
VCR									
Shogun	2035								
Signature	2027								
Singer	2042	2061	2090						
Sony	2051	2074	2084						
STS	2042								
Sylvania	2042	2047	2050	2062	2064	2071			
Symphonic	2028	2047							
Tandy	2033								
Tashiko	2036								
Tatung	2081								
Teac	2047	2081							
Technics	2042	2079							
Teknika	2036	2042	2047						
TMK	2035								
Toshiba	2037	2052	2053	2056	2058	2059	2063		
Totevision	2035	2036							
Unitech	2035								
Vector Research	2031	2032	2037						
Victor	2032								
Video Concepts	2031	2032	2037						
Videosonic	2035								
Wards	2027	2035	2036	2037	2042	2044	2047	2049	2058
	2061								
White Westinghouse	2028								
XR-1000	2042	2047	2061						
Yamaha	2031	2032	2033	2040	2081				
Zenith	2029	2060	2077	2084	2089	2090			
DVD/VCR Combo (DVD)									
Broksonic	3072								
Daewoo	3062								
Emerson	3073								

## Remote Code List

Brand	Code		
DVD/VCR Combo (DVD)			
Go Video	3046	3127	3129
Hitachi	3126		
JVC	3047	3097	
Panasonic	3066		
Philips	3051		
Polaroid	3007		
RCA	3048		
Samsung	3049	3085	3074
Sanyo	3050		
Sony	3065	3067	
Toshiba	3080	3084	
Zenith	3052	3128	
DVD/VCR Combo (VCR)			
Broksonic	2078		
Daewoo	2085		
Emerson	2076		
Go Video	2092	2043	2045
Hitachi	2038		
JVC	2093	2030	
Panasonic	2082		
Philips	2091		
Polaroid	2041		
RCA	2094		
Samsung	2095	2054	2075
Sanyo	2096		
Sony	2051	2074	
Toshiba	2052	2053	
Zenith	2089	2029	

## Remote Code List

Brand	Code									
Cable Box										
ABC	4000	4001	4002	4004	4046					
Adelphia	4049									
Antronix	4006	4007								
Archer	4007	4008								
Cable Vision	4050									
Cabletenna	4006									
Cableview	4005									
Colour Voice	4010	4011								
Comcast	4051	4052								
Comtronics	4012									
Contec	4014									
COX	4053									
Eastern	4015									
GC Electronics	4007									
GE	4000	4001								
Gemini	4016	4017								
General Instrument	4051									
General Instruments	4001	4048								
Hamlin	4018	4019	4020	4026	4033	4039	4047			
Hitachi	4001									
Jerrold	4001	4016	4021	4022	4046	4048				
Magnavox	4023									
Memorex	4024									
Motorola	4052	4053	4054							
Movie Time	4025									
NEC	4003									
NSC	4025									
Oak	4014	4027								
Panasonic	4042	4045								
Philips	4009	4010	4011	4013	4017	4023	4028	4029	4030	
Pioneer	4031	4032								

## Remote Code List

Brand	Code				
Cable Box					
Proscan	4000	4001			
RCA	4005	4041	4043	4045	4048
Realistic	4007				
Regal	4020	4033	4047		
Regency	4015				
Rembrandt	4001				
Samsung	4032				
Scientific Atlanta	4004	4034	4035	4036	4049
Signal	4016				
Signature	4001				
Sony	4050				
Sprucer	4045				
Standard Component		4037	4038		
Starcom	4016	4046			
Stargate	4016				
Starquest	4016				
TIME WARNER	4055				
Tocom	4002	4021			
Tusa	4016				
TV86	4025				
Unika	4006	4007			
United Cable	4046				
Universal	4006	4007	4008		
View Star	4014	4023	4025		
Zenith	4044				
SAT					
Alphastar	5023				
Chaparral	5002	5003			
DIRECTV	5069				
Dishnet	5022				

## Remote Code List

Brand	Code					
SAT						
DISH Network	5061	5065	5066	5067	5068	
Drake	5004	5005				
Echostar	5030					
GE	5000	5001	5016	5033	5034	5056
General Instruments	5006		5007	5008		
Hitachi	5026	5027				
Hughes	5036	5058	5069			
Hughes Network	5069					
Hughes Network Systems	5031	5069				
JVC	5025					
Mitsubishi	5043	5045				
Panasonic	5019	5049	5052	5054		
Philips	5028	5039	5048	5057	5058	5063
Pioneer	5053					
Primestar	5020					
Proscan	5000	5001	5016	5033	5034	
RCA	5000	5001	5016	5024	5033	5034 5040 5041 5055
	5058	5059				
Realistic	5009					
Samsung	5044	5046	5058			
Sony	5017	5035	5037	5038	5042	5047 5060 5062
STS	5032					
STS1	5010					
STS3	5012					
STS4	5013					
Toshiba	5014	5018	5050			
Uniden	5015		5029			
Zenith	5051		5064			

## Remote Code List

Brand	Code									
Audio										
Aiwa	6000	6001	6002	6004	6005	6006	6007	6037	6054	
BOSE	6007	6071								
Carver	6000	6036								
Citizen	6060									
Denon	6008									
Fisher	6036									
GE	6062									
Goldstar	6050	6055								
Harman Kardon	6000	6009	6047							
Hitachi	6068									
JBL	6009									
JVC	6010	6052	6058							
Kenwood	6011	6012	6049	6056						
Linn	6000									
Magnavox	6000	6069								
Marantz	6000	6034								
Nakamichi	6046									
NEC	6067									
Onkyo	6018	6039	6040	6051						
Optimus	6042									
Panasonic	6035									
Philips	6000									
Pioneer	6021	6022	6043	6044	6057	6070				
Proton	6069									
Quasar	6035									
RePlay	6062									
RCA	6024	6025	6026	6059						
Sansui	6000									
Sharp	6063	6064	6065	6066						
Sherwood	6027	6045								

## Remote Code List

Brand	Code									
Audio										
Sony	6017	6028	6029	6030	6031	6032	6033	6054	6080	
	6081									
Teac	6053									
Technics	6016	6035								
Toshiba	6061									
Victor	6058									
Wards	6000	6021								
Yamaha	6003	6014	6015	6021	6041					
HTIB (DVD)										
BOSE	3130									
JBL	3043									
Koss	3060									
Onkyo	3024									
Philips	3036									
Pioneer	3016									
RCA	3042									
Sony	3108	3113								
Venturer	3011									
HTIB (AUDIO)										
BOSE	6071									
JBL	6072									
Koss	6074									
Onkyo	6075									
Philips	6077									
Pioneer	6078									
RCA	6079									
Sony	6081	6080								
Venturer	6082									

## This image shows a single sheet of white paper with horizontal blue or grey ruling lines, typical of notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.